



NEBOG NEWS

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Public Hearing Set for Proposed Rules and Regulations

The Nebraska Board of Geologists will hold a public hearing on October 4, 2001 at 10:00 a.m., to be held at 301 Centennial Mall South, 6th Floor of the Nebraska State Office Building in Lincoln, Nebraska. The purpose of the hearing is to take testimony and evidence about adoption of Title 171, Chapters I-VI, entitled Nebraska Board of Geologists.

Effective January 1, 1999, the Nebraska Legislature established the Geologist Regulation Act. Pursuant to the Act, new rules and regulations are being proposed. Title 171 – Nebraska Board of Geologists provides for licensure of professional geologists within the State of Nebraska and establishes a code of practice on professional conduct. Any geologist who is qualified to practice geology in the State of Nebraska would be impacted by these rules.

All interested persons may attend and testify orally or by written submission at the hearing. Interested persons may also submit written comments prior to hearing, which will be made part of the hearing record at the time of hearing if received by the Nebraska Board of Geologists on or before ten days prior to the hearing.

Draft or working copies of the proposed rules are available at the offices of the Secretary of State, Regulation Division, Room 343, State Capitol, Lincoln, Nebraska, and at the Nebraska Board of Geologists, 301 Centennial Mall South, 6th Floor of the Nebraska State Office Building in Lincoln, Nebraska. Copies may also be obtained on the Nebraska Board of Geologists web site at <http://www.geology.state.ne.us/board/nbg.htm>

Thank You Nan!

Dr. Nan Lindsley-Griffin served as the Chairperson of the Nebraska Board of Geologists from its inception in 1999 until May of this year. Dr. Lindsley-Griffin guided the Board from its start, when the Board had no funds whatsoever, through the rush of applications during the grandfather period, to the point where the Board has sound structure, efficient processes, and stable finances. She worked diligently with other organizations, such as ASBOG and the Board of Engineers and Architects to the benefit of Nebraska's registered geologists. Though still a member of the Board, the other Board members would like to take this opportunity to thank Dr. Lindsley-Griffin for her tremendous contribution.

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Promoting Professionalism

By Jim Cannia

As professional geologists we all have a common goal to provide excellence in our work and to build confidence in the public that when they see your seal on your work they can be assured of its integrity. Your Board is here to provide the standards that all geologists within Nebraska work under. Toward that end we have developed those standards that will provide Nebraska and the nation with the best professionals in the field.

To be a registered geologist in Nebraska you must have completed a curriculum of study ending in a bachelor of science or arts, with not less than 30 semester hours of geology. The applicant must have completed a group of core courses including mineralogy, petrology, structural geology, stratigraphy/sedimentology/soils, field methods and physical geology.

These are also the basic classes from which the fundamentals of geology test are developed. An article on the ASBOG test in this newsletter goes in to greater detail on this subject. Testing is a requirement of any person seeking registration as a Professional Geologist in Nebraska. The board voted last year to join the ASBOG and be a part of the national testing program. The test is given nation wide and is an important part of your professional status. By passing the exam you are making yourself available for licensure in other states, who are part of ASBOG, without examination. The majority of states that require registration are part of this organization.

The ASBOG test is a two-part test consisting of a fundamental section and a practice section. As a new geologist coming out of the university you will take the fundamental section.

After you have gained 5 years professional experience you will take the practice section of the test. Remember, if you do not pass the exam the first time you may retest. The experience you gain from the first test will prepare you for the second examination. Other applicants that have professional experience meeting board approval will be allowed to take test sections at the same time. If you are a professional from another state and have passed the ASBOG test or an equivalent exam approved by the board you may be registered without exam. These are the three different paths to take to become a professional Geologist in Nebraska.

As Professional Geologists in Nebraska you can take pride knowing that you are promoting professionalism by being a registered Geologist in our state.

Renewal Information

In October of 2001, Renewal Notices are sent to all licensees. Renewals are for one year. The renewal fee is due on or before December 31, 2001. Those who have not received a renewal notice or have an address change please notify the office by email at geology@nol.org

Those who become licensed prior to December 31 of each year will be sent a renewal notice.

How to Renew a License

- Complete and make any changes to the renewal form on or before December 31 and return with the \$50 fee made payable to: Nebraska Board of Geologists.
- A Renewal Card with your expiration date, and receipt is sent after payment is received.
- All Renewal forms are sent out on an annual basis in October of each year.

Penalty Information

After 12/31/01, add \$5.00 for any month or any part of a month, up To \$50 After 4/1/03, a new application will be required.



A Message from the Board Chairperson

Making Registrant Information Available To Outside Interests

By Dave Becker

Most of you have probably been inundated recently with notices from banks and credit card companies about their policies to protect your privacy. This would also be a good time for the Nebraska Board of Geologists to discuss our policy for distributing information about you to outside interests.

The statutes underlying geologist registration in Nebraska mandate that the Board make available a roster of registered geologists and the Board does. We have a list of registrants with their city, state, and registration number available on our web site and we have provided this list to the Nebraska Secretary of State for distribution as well. We are occasionally asked for a mailing list of registrants and the statutes allow the Board to be reimbursed for distributing such a list. We have done this a few times. The Board is concerned, however, about what information about you is distributed. In some cases, registrants will not want mailing addresses and phone numbers made available to the public. In other situations, registrants would like any opportunity to provide their business addresses and phone numbers to prospective clients.

We want you to have the option to indicate what information the Board is to provide when asked for the registrant roster. As a result, we have asked for you to indicate on the registration renewal form what data you want made available. You may request that the list only include your name and city; your name, address, and city; or your name, address, city, and phone. You may change the address and phone you want the Board to make available. If the renewal notice goes to your home address, perhaps you would want to provide your business address instead. Please complete the box on the renewal form regarding what information you want made available to the public; if you do not complete the box, the Board will only make your name, city, and registration number available.

Currently, we plan to continue to make the list of names, cities, and registration numbers available via the web. We will periodically sell, on a case-by-case basis, an electronic mailing list (subject to the limitations you indicate) to outside entities for a modest fee. We would consider the nature of the potential use of the list in deciding to sell it. Please call or e-mail the Board (402-471-8383), or geology@nol.org if you have any questions or comments about this policy.

THE ASBOG EXAMINATIONS

By Dr. Nan Lindsley-Griffin
(Approved for publication by ASBOG)

The ASBOG (National Association of State Boards of Geology) examinations have become the national standard for evaluating professional competence for licensing or certification. Given twice annually (in September and March) on the same date and time in all ASBOG member states¹, the exams consist of two parts: the Fundamentals of Geology (FG) and the Practice of Geology (PG). The FG exam is designed to assess knowledge attained during the completion of the baccalaureate degree in geology, and the PG exam is designed to evaluate skills and knowledge developed during the first five years of professional geological experience. Most states require applicants to have completed the baccalaureate degree or to be within a semester of completion before attempting the FG exam. In many states the PG exam is not open to applicants until they have completed five years of experience. Some states also require an additional, state-specific exam¹.

How are the topics on the exam chosen?

ASBOG conducts a task analysis periodically, sending questionnaires to a randomly selected group of professional geologists in every member state; in 2000 the survey included geologists in nine Canadian provinces¹ as well. These questionnaires list over 60 tasks that are commonly performed by professional geologists. Each respondent is asked to rate each task on three scales: 1) the time she or he spends performing the task, 2) the importance of each task in protecting the general public, and 3) the degree to which competence in this task upon graduation as well as at the time of licensure is essential.

Responses are analyzed by professional statisticians to determine which types of knowledge and skills are most important at the post-baccalaureate level and at the post-five year experience level. Demographics of the respondents are also examined to evaluate differences between regions or subgroups of professionals. In general, the results are surprisingly consistent among geologists in different states, provinces, and regions, suggesting that the task analysis is valid for the entire population being served. The main difference is that U.S. geologists rank mineral and petroleum exploration tasks lower, and groundwater and engineering geology tasks higher, than their Canadian counterparts.

Continued on page 5.

Nebraska Board of Geologists Professional Geologist Examinations

Plans are in progress for the March 15, 2001 Nebraska ASBOG Exam. The Association provides exams for State Boards of Geology (ASBOG) at a fee established by their Board. Please remember all fees are non-refundable and not transferable.

Arrangements can be made to take the Nebraska exam in another state Board's examination site (e.g., Wyoming) if necessary, provided they are also an ASBOG member. If you require this option or would like more information please contact us by email at geology@nol.org



Revised ASBOG Schedule

2002

Friday March 15, 2002
Friday October 4, 2002

2003

Friday March 7, 2003
Friday October 3, 2003

Examination "site" information can be downloaded from the website

Fee Schedule

Application Fee	\$50.00
Licensing Fee (payable upon approval of application)	\$240.00
TOTAL	\$290.00
Geologist-in-Training Application	\$50.00
Other Fees	
Annual Renewal Fee	\$50.00
Geologist-in-Training Annual Renewal	\$25.00
Expired Registration Penalty 10% of Renewal Fee per month, not to exceed \$50	
Temporary Licensing Fee*	\$175.00
Certificate of Authorization for Organization	\$100.00
Examination Fees:	
Fundamentals (FG)	\$125.00
Practice (PG)	\$150.00
Both	\$275.00
Reservation Fee (For one or both tests)	\$35.00
Replacement of Certificate Fee	\$50.00

*A Temporary license is good for one project only, for the period of one year. An individual or company may receive a temporary license only once in each 3-year period. If you do not have an active PG license in another state, you must apply for registration in Nebraska on our regular application form.

NEBRASKA BOARD OF GEOLOGISTS Examination Registration Form

(Please use one form per individual registrant. Copy as needed.)

Name _____ PG# _____

Mailing Address _____

City _____ State _____ Zip Code _____ Phone _____ Fax Number: _____

Company Name _____ E-Mail _____

PAYMENT METHOD: ☐ Check ☐ ITD ☐ Money Order

Mail fee & registration to: State of Nebraska Board of Geologists
P.O. Box 94844
Lincoln, NE 68509-4844



For special accommodation needs, please specify and submit prior to January 15th, 2002.

*****A Reservation Fee of \$35.00 is due on or before January 5, 2002 ***Exam Fees are due on or before January 31, 2002

I will take the: (Please check all that apply) ☐ FG Exam (8:00 – 12:00) (\$125.00) ☐ PG Exam (1:30 – 5:30) (\$150.00)

Please direct any questions to Shelly Norval via email at geology@nol.org or phone at 402-471-8383

Reciprocity and Comity - Defined

Your Board spent a great deal of time discussing the issues of Reciprocity and Comity before coming up with our current policy [see below]. According to Webster's New World Dictionary, *reciprocity* refers to equivalent or interchangeable things; *comity* (in law) is the principle by which courts in one jurisdiction may accept decisions made under the laws and decisions of another jurisdiction. Although the concepts are similar, they are not quite the same, and even ASBOG states have not been able to agree on a uniform application of reciprocity/comity. The main reason for the difficulty is that each state's law (or province, territory) is slightly different than the others.

The Geologists Registration Act (Nebraska Statutes 81-3501 to 81-3541) lists four requirements for professional registration: 1) character; 2) B.S. degree in Geology; 3) 5 years of post-baccalaureate experience working in geology; and 4) passing scores on examinations covering the Fundamentals of Geology and the Practice of Geology. Although the Act does not specifically define either reciprocity or comity, it does state that the first three criteria...

"may be considered by the board to be fulfilled if the applicant maintains a current certificate of licensure to practice geology issued pursuant to the authority of any state or possession of the United States or the District of Columbia based on requirements that do not conflict with the Geologists Regulation Act and were of a standard not lower than that specified in the applicable licensure in effect in this state at the time the certification was issued."

In other words, we are authorized to offer reciprocity (but not comity) provided the applicant has been licensed elsewhere on the same basis as Nebraska registrants, AND HAS TAKEN THE ASBOG EXAMS OR THEIR EQUIVALENT.

Complaints

The Board has designed a form on which any citizen can file a complaint of improper practice or practicing without a license. The Complaint Form will soon be available from our website, or you may contact our office for a copy.

We encourage all licensed professionals as well as any concerned citizen to notify the Board should they become aware of persons practicing in violation of the Geologists Regulation Act. Although anonymous complaints cannot be accepted, your information can be handled confidentially if necessary.

Reciprocity Policy

The Board's position is that reciprocity will be granted if the applicant for reciprocity meets the following requirements listed below:

TO APPLY FOR A PG LICENSE:

1. Must have a current geologist registration or license in good standing in another state. (Contact your local state board of registration and ask them to send a "verification of your registration" and good standing to the address below).
2. Submit a completed application form with a \$50.00 application fee to the Nebraska Board of Geologists. (Transcripts or letters of reference are not required at this time if in good standing).
3. Must have passed the ASBOG examinations Fundamentals of Geology and Practice of Geology, or their equivalent. (The Board may waive the requirement for passing the ASBOG examinations or equivalent, if applicant has continuously held geologist registration or licensure in good standing since December 31, 1991. Such applicants may be asked to submit additional material, including transcript or letters of reference.)
4. Meet the Nebraska statutory education requirement:
Have "...a minimum of thirty semester hours or forty-five quarter hours of course work in geology and have received a baccalaureate or advanced degree in geology or a geologic specialty...."
5. Meet the Nebraska statutory requirements for experience: "...a documented record of a minimum of five years of progressive experience, obtained subsequent to completion of the education requirements, in geologic work of a grade and character which indicates to the board that the applicant is qualified to assume responsible charge of such work upon licensure as a geologist"

An application packet and verification form may be downloaded from our website. <http://www.geology.state.ne.us/board/app.htm>.



Continued from page 3...

Here are some examples of tasks and the results on each from the 2000 Task Analysis. Highest average ratings on all three scales were given to the task "Construct and interpret maps and other graphical presentations". The lowest ranked in both time spent and importance was "Plan and conduct applicable paleontological investigations". The lowest ranked in competence needed was "Evaluate submarine currents and transport processes in sedimentary sequences". These latter two tasks as well as "Evaluate isostatic effects on shorelines" were deemed too insignificant to be included on any ASBOG exam. Each remaining task statement was classified by Subject Matter Experts (SMEs) as to whether it is appropriate for the FG exam, the PG exam, or both. The relative weight of each task was calculated from the formula:

$$\text{Task Weight} = \text{Time Spent Mean} \times (\text{Importance Mean})^2$$

From these data, "blueprints" of the ideal FG and PG exam contents are developed, which govern the number of questions pertaining to each task that will be included on each exam. For example, 11 questions for "construct and interpret maps" might be included on each FG exam, but only 4 on each PG exam. For the task "Plan and conduct field operations", no questions might be included on the FG exam, but as many as 8 questions might be on the PG exam. (Table 1 gives additional examples of task statements).

¹ **Member states** (as of Oct. 2000 annual report) include: Alabama, Arizona, Arkansas, California, Delaware, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Maine, Minnesota, Mississippi, Missouri, Nebraska, North Carolina, Oregon, Pennsylvania, Puerto Rico, South Carolina, Virginia, Wisconsin, Wyoming. Non-member states requiring ASBOG or comparable exam: Idaho, New Hampshire, Washington. States with proposed or recently passed legislation that require ASBOG or comparable exam: Colorado, Hawaii, New Mexico, New York, Ohio, Oklahoma, Tennessee, Texas, Utah.

¹ **States** that give their own exam, or require a state-specific supplement to the ASBOG exam: California, Maine, Oregon.

¹ **The Canadian Council of Professional Geoscientists** (CCPG) signed a Cooperation Agreement with ASBOG in August 2000, and may join the organization. The nine provinces involved in the 2000 task analysis include: Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland, Northwest Territories, Ontario, Quebec, Saskatchewan.

How are exams put together?

Any professor will tell you that there's no such thing as a perfect exam. Although ASBOG has a test bank of questions that have accumulated over the past decade, the test bank is continually being reevaluated and improved, and the questions on individual exams are carefully critiqued. This is done by the professional psychometricians in conjunction with the Council of Examiners (COEs), composed of a representative from each state board, plus Subject Matter Experts (SMEs). All of these volunteers are registered professional geologists themselves. COEs and SMEs meet at workshops held twice a year, about a month after each national exam. Typically, some 15-20 experts will focus on each of the two exams, keeping in mind that the FG exam is testing the knowledge that a properly trained geologist with a baccalaureate degree would have, and the PG exam is testing the skills needed by the working professional after five years of experience.

The SMEs begin by taking the most recent exam in their focus area (FG or PG). After an hour or two to read and answer the questions, they go down the list and item-by-item give their answer. If all the SMEs agree on the correct answer, that's a good sign – the item is well written and clear. If the SMEs disagree on the correct answer, both the item and its key are subjected to intense scrutiny. Comments written by examinees on specific items are read to the group at this time and their concerns are addressed. If an item has two possible answers the group may decide to double-key it, or even to discard it from the exam. This is rare – but in such cases the exams are re-scored. No item that has performed poorly is ever returned to the test bank. If the SMEs feel that any item is vague, out of date, or inappropriate in the light of current professional practice, it will be revised or even discarded and replaced with one or more new items appropriate for that task.

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The SMEs also review items selected for the next upcoming examinations. Items are selected randomly from each of the test bank categories by the psychometricians, in percentages based on the exam blueprints developed from the task analysis study. The SMEs read each item on their focus group's draft exam critically for clarity, applicability, and correctness. Questionable items are revised or replaced before the new exam is finalized. SMEs are encouraged to bring new items to the workshop as well as to write additional items for future use. This can be a very humbling experience, because every new item (as well as every revision) must be approved by three other SMEs, each of whom is free to "improve" your original item. By the time your original write-up works its way around the table back to you, it may be unrecognizable – but it probably will be much better than you thought it was!

ASBOG and the Council of Examiners have strict guidelines concerning confidentiality, so please don't ask your Nebraska COEs and SMEs for specifics about the exams. For examples of the kinds of questions you might see on the exams, as well as other information about the exams, log on to the ASBOG web site at <http://www.asbog.org>.

Table 1. Examples of task statements (based on 2000 Task Analysis).

Task Statements	FG Exam	PG Exam
A. Field Methods and Remote Sensing		
Plan and conduct field operations		X
Select and interpret appropriate base maps for field investigations	X	X
Identify geological structures, lineaments, or fracture systems from surface mapping or remote imagery	X	X
Prepare soil, sediment, geotechnical, and lithological logs	X	X
Construct and interpret maps and other graphical presentations	X	X
B. Mineralogy, Petrology, Petrography & Geochemistry		
Identify chemical and physical characteristics of rocks	X	
Identify rock-type sequences, associations and genesis	X	
Evaluate geochemical data and construct geochemical models related to rocks and minerals	X	
C. Sedimentology, Stratigraphy, & Paleontology		
Identify and interpret sedimentary structures	X	
Establish stratigraphic correlations and interpret rock sequences, positions, and ages	X	X
D. Geomorphology		
Identify and classify landforms	X	
E. Structural Geology & Tectonics		
Identify structural features and interrelationships	X	
Determine orientation of structural features	X	
F. Geophysics & Seismology		
Design, implement, and interpret data from borehole geophysical programs	X	X
G. Hydrogeology		
Design and install groundwater exploration, development, monitoring, and pumping/injection wells		X
Characterize or determine hydraulic properties of formations	X	X
Characterize water quality and quality-altering processes (natural and man-made)	X	X
Define and characterize groundwater flow systems	X	X
Evaluate, manage, and protect groundwater supply resources		X
H. Engineering Geology		
Interpret geologic data for engineering and development purposes		X
Identify, map, and evaluate geologic hazards	X	X
Plan and evaluate remediation and restoration programs		X
I. Mineral, Petroleum, & Energy Resources		
Design and conduct rock/mineral resource exploration programs		X

LICENSURE UPDATES

January 1, 2001 through July 31, 2001

Daniel S. Townsend; ADA, MI

Lynn Parman; Kansas City, MO

Linda J. Barnes; Laramie, WY

Bryan S. Elledge; Cape Girardeau, MO

Steven A. Fischbein; Fountain Valley, CA

William Mark Bailey; Norcross, GA

Robert S. Sumsion; Lincoln, NE

Michael E. Crain; Pacific Junction, IA

Douglas E. Kuhn; Overland Park, KS

William C. LaRow III; Denver, CO

REGISTRATION BY GIT

Robert T. Miller; Omaha, NE



**Congratulations to those that
Passed the ASBOG Exam!**

Fundamentals and Practice of Geology

Dennis J. Anderson, NE ■ Donna S. Erickson, NE
Terry Thonen, NE

Fundamentals of Geology

Jack C. Eslick, KS ■ David L. Goss, NE ■ Robert T. Miller, NE



WHO SHOULD BE REGISTERED IN THE STATE OF NEBRASKA?

THE GEOLOGISTS REGULATION ACT [81-3501 through 81-3541]

Purpose: to safeguard life, health, and property and to promote the public welfare through the regulation of the profession of geology.

Board of Geologists: established to oversee the registration and licensing of professional geologists for the state of Nebraska, and to enforce the Geologist Regulation Act.

In general, if you are a geologist whose work is in areas affecting public health and safety, you should be registered. Examples include, but are not limited to, geologists working in environmental geology, engineering geology, and hydrogeology.

A Geologist is a person who is qualified to practice geology by reason of special knowledge and use of the earth sciences and the principles of geology and geologic data collection and analysis acquired by geologic education and geologic experience.

Geology means the science which includes treatment of the earth and its origin and history, in general: investigation of the earth's constituent rocks, soils, minerals, solids, fluids including underground waters, gases, and other materials; the study of the natural agents, forces, and processes which cause changes in the earth or on its surface; and the application of this knowledge of the earth.

The Practice of Geology means "any service or creative work if the adequate performance of the service or work requires geologic education, training, and experience to include such services or creative work as geological consultation, investigation, planning, surveying, mapping, and inspection of geological work, and the responsible supervision thereof, the performance of which is related to public welfare or the safeguarding of life, health, property, and the environment and teaching, including research and service, of advanced geological subjects." [81-3515]

We're on the Web!

<http://www.geology.state.ne.us/board/nbg.htm>